III. Wildland Fire Management Strategies

A. General Management Considerations

In order to comply with direction provided in the legislation, policies, and plans listed under Section II above, the FMP will incorporate the following fire management guidance:

- Identify the Appropriate Management Response (AMR) goals, objectives, and constraints by specific Fire Management Unit (FMU) within the FPU. All wildland fire activities will be managed as described in the FMU guidance outlined in Chapter III, Section D of this document.
- Work collaboratively with at-risk communities and other communities of interest within the Wildland-Urban Interface (WUI) to develop plans for risk reduction.
- Work collaboratively with local and regional partners (Inyo National Forest, National Park Service units, California Department of Forestry, and Los Angeles Department of Water and Power) to develop cross-boundary management strategies and prioritize interagency fire management actions.
- Use prescribed fire, mechanical, chemical, and/or biological treatments to meet management goals and objectives.
- Use or manage fire to restore and/or sustain ecosystem health based on sound scientific principles and information, balanced with other resource management goals and societal goals, including health and safety, and air quality.
- In those areas of the Bishop Field Office under California Department of Forestry (CDF) protection, coordinate with CDF to develop AMR actions for wildland fires on or threatening BLM lands. Ensure emphasis on minimizing loss of life and damage to private property, minimizing environmental damage due to suppression efforts, firefighter and public safety, and other resource values.
- Employ prevention strategies that reduce human ignitions, with special emphasis in campgrounds, WUIs, and along transportation corridors

B. Wildland Fire Management Goals

As stated in Chapter II, the Bishop Field Office will conduct wildland fire management actions in compliance with the 1995 Federal Wildland Fire Policy and the 2001 Federal Wildland Fire Policy Update guiding principles. These principles include:

- Firefighter and public safety are always the highest priority in every fire management activity.
- Use the AMR in all wildland fire suppression actions.
- Where permitted under this FMP and appropriate conditions exist, allow naturally ignited wildfires to burn and perform their ecological function.
- Conduct all fuels reduction and other vegetation treatment projects using prescribed fire, mechanical, or other means in a safe, timely, and effective

fashion. Emphasize project work in the WUI, municipal watersheds, and to protect, maintain, and enhance other resources.
- Conduct community risk assessments in terms of direct wildland fire impact and economic values. Use collaborative planning, projects, and education programs to mitigate identified risks.
- Coordinate fire management activities among all agencies within and adjoining the FPU. Maintain existing partnerships and continue to seek out new partnerships.
- Incorporate an inter-disciplinary approach to fire and fuels management decision-making.

C. Wildland Fire Management Options

Wildland fire management options for the Bishop Field Office will typically include the following:

- Wildland Fire Suppression – Appropriate Management Response
- Wildland Fire Use
- Prescribed fire
- Non-Fire Treatments- includes mechanical, biological, and chemical means
- Post Fire Rehabilitation and Restoration
- Community Protection, Community Assistance and Rural Fire Assistance

The Bishop Field Office will provide an Appropriate Management Response (AMR) on all wildland fires that occur within the FPU. Emphasis will be placed on firefighter and public safety, minimizing environmental damage as a result of suppression activities, and protecting private property, economic benefits and resource values consistent with BLM policy, resource objectives, and standards and guidelines.

The Bishop Field Office and its cooperators will respond to each wildland fire in a timely manner with appropriate suppression resources, based on established fire management direction, interagency agreements, and Field Office Manager-approved Operating Plans.

AMR actions will be pre-defined in fire management plans and other operating plans. This pre-planning allows for the development of fire management strategies which meet the objectives established in the RMP.

Through a Cooperative Fire Protection Agreement, CDF has protection responsibilities for Bishop Field Office lands in Inyo County. BLM and CDF will coordinate to develop incident objectives and implement the AMR for wildland fire on or threatening BLM land. Coordination will occur through Annual Operating Plans and on an incident-by-incident basis.

D. Fire Management Strategies by Fire Management Unit (FMU)

All BLM lands managed by the Bishop Field Office are covered under this FMP. These lands have been split into seven Fire Management Units (FMUs). See map, Appendix A. Specific fire management direction is based on the FMU. For each FMU, the following are maximum treatable/burnable acreage percentages for each vegetative community:

- Desert Scrub – 1%
- Shrub Steppe – 10% (Wyoming sagebrush – 5%)
- Pinyon –Juniper – 30%
- Aspen – 15%
- Mixed Conifer Forest – 10%

If the treated/burned acreage exceeds the allowable percentage, no further treatments outside the WUI will be allowed in the vegetative community during the 10-year period.

Table 1 summarizes some of the quantifiable Fire Management Objectives presented below in the individual FMU prescriptions.

Table 1.

FMU Name and Number	10-year Maximum Wildfire Acres Burned	Maximum Wildfire Size (90% of all fires)	10-year Maximum Wildfire Use (WFU) Acres Burned	10-year Maximum Prescribed Fire and Non-Fire Treatment Acres
Coleville CA170-001	1% (215 ac.)	1 ac.	N/A	3% (645 ac.)
Bridgeport Valley – Bodie Hills CA170-002	2% (3,186 ac.)	1 ac.	N/A	15% (23,899 ac.)
Granite Mountain CA170-003	2% (2,706 ac.)	10 ac.	N/A	10% (13,532 ac.)
Long Valley CA170-004	1% (184 ac.)	1 ac.	N/A	5% (918 ac.)
Benton CA170-005	2% (3,571 ac.)	1 ac.	N/A	10% (17,855 ac.)
Owens Valley CA170-006	2% (3,797 ac.)	1 ac.	N/A	3% (5,696 ac.)
Inyo Mtns. Wilderness CA170-007	5% (2,251 ac.)	100 ac.	10% (4,502 ac.)	1% (450 ac.)

Coleville FMU – CA170-001
FMU Type: WUI and Special Management Areas

Description of Coleville FMU

Location – This 51,197-acre FMU is located within the West Walker River watershed. Land ownership is 21,495 acres BLM, 9,908 acres State, and 19,794 acres private and other. The FMU includes the communities of Walker, Coleville, and Topaz in Mono County. This FMU encompasses the entire Coleville Management Area, as defined in the Bishop RMP and includes the Slinkard Valley ACEC and Slinkard WSA.

Characteristics – This FMU consists of mountain ridges and slopes with well defined access routes. Elevations range from 5,000 ft. to 8,000 ft. Major plant community types in this FMU include pinyon pine woodlands, sagebrush steppe, mountain mahogany, old growth white fir and Jeffrey Pine forest, aspen, meadow and riparian. Cheat grass invasions have occurred in large portions of the FMU due to recent, large wildland fires. This cheat grass invasion will alter the natural fire regime in these areas. No livestock grazing occurs in Little Antelope Valley or the area east of East Side Lane. The remainder of the FMU has limited areas for grazing and is closed to grazing until 2005, due to recent fires.

Soils are comprised of granitic and volcanic parent materials with ridges and mountain slopes susceptible to erosion during major precipitation events, especially in recently burned sites. There are numerous small canyons and intermittent streams that bisect the FMU, with soil textures ranging from rocky to loamy sand. Three major streams occur in the FMU and provide recreational trout fishing. Additionally, Mill Creek and Slinkard Creek provide habitat for Lahontan cutthroat trout and part of the West Walker River has been designated by the State of California as a Wild and Scenic River.

Fire History and Occurrence - In the period from 1980 thru 2002, 71 wildland fires occurred wholly or partially within this FMU, burning a total of 38,078 acres (includes acres burned outside the FMU boundary). Fire cause was 56% natural (lightning), 38% human-caused and 6% unknown. Fire size distribution for the Coleville FMU is displayed in the Table 2, below.

Table 2.

Fire Size Class	# of Fires	Acres Burned
A (0.25 ac. or less)	45	4.4
B (0.26 – 9.9 ac.)	11	26
C (10.0 – 99.9 ac.)	8	304
D (100 – 299 ac.)	0	0
E (300 – 999 ac.)	2	1,034
F (1,000 – 4,999 ac.)	3	5,050
G (5,000 + ac.)	2	31,660
Total	71	38,078

All seven of the Size Class E, F, and G fires occurred in either 1996 or 2002. Normal fire season is May 1st thru October 31st.

Fuel Models, Weather/Climate, and Fire Behavior - A wide variety of fuel models are represented in the Coleville FMU, covering the grass, shrub, and timber groups. Past large fires have created extensive areas of cheat grass (Fuel Model 1). In other areas, annual grasses mix with native shrubs to produce Fuel Model 2 conditions. Shrub steppe areas fall under Fuel Model 6, and mixed conifer forests west of Slinkard Valley are represented by Fuel Model 10.

This FMU is significantly affected by the orographic influences of the Sierra Nevada. Warm, dry summers are typical. Relative humidity is usually low, and live fuel moisture typically drops to 60 – 80% by late summer and early fall. Thunderstorms are common and frequently these storms produce little or no rain. Multiple ignitions caused by dry lightning are common during these periods. Additionally, these thunderstorms are usually accompanied by strong, erratic winds.

Fire behavior is generally moderate, but in the vicinity of thunderstorms or other periods of high wind, fire behavior readily becomes extreme. Daytime winds are normally upslope and up canyon, with late afternoon shifts to down slope, down canyon. Very strong winds associated with cold fronts moving through the area are not uncommon on the east side of the Sierra Nevada, particularly in the spring and fall.

Fire Regime and Condition Class (FR/CC) – Shrub steppe is 3/2 (Fire Regime 3 and Condition Class 2). Pinyon/juniper woodlands are 3/3. Mixed conifer is 4/3.

Values at Risk – Old growth mixed conifer forests, Golden Gate Mill historical structures (eligible for listing on National Register of Historic Places), Lahontan cutthroat trout habitat and hatchery, mtn. beaver habitat, sage grouse habitat, mule deer winter range, aspen and riparian habitat, loss of native plant species to conversion to cheat grass, forage for domestic livestock grazing, fences, unidentified cultural sites, Slinkard ACEC, Slinkard Wilderness Study Area (WSA), Highway 395 Scenic Byway, California Department of Fish and Game (DFG) structures in Slinkard and Little Antelope Valleys, private property, and power line right-of-ways.

Human Environment/Communities at Risk – Communities in the Coleville FMU are primarily comprised of permanent residents who live and work within the FMU or nearby commuting area. The FMU has a recent history of large, damaging wildland fires, and most homeowners recognize the need for and benefits from defensible space and community fuels reduction work. Traditional home defense brochures, press releases and flyers work well in this FMU. Posted flyers at local gathering places, such as post offices, general stores, or other businesses, serve as an excellent method for information distribution. The small town atmosphere helps spread information by word-of-mouth and e-mail. The audience is mainly small town residents, ranchers, and recreationists.

Communities at risk from wildland fire include: Topaz, Coleville, Walker, Camp Antelope, and the homes along Eastside Lane. No organized fire safe councils currently exist in this FMU.

Fire Management Objectives in Coleville FMU

Suppression –

- No more than 1% of BLM lands (215 acres) are burned by wildland fire over the 10-year period
- At all Fire Intensity Levels (FIL), 90% of all unplanned ignitions are kept under 1 acre in size
- No loss of "Values at Risk" or "Communities at Risk" from wildland fire
- Fires on BLM land remain on BLM land – no crossover to private or other agency land
- The intensity of fire suppression effort is limited to the most economical response consistent with human and resource values at risk
- Bulldozers and other heavy equipment are only used in old growth timber stands, prominent viewsheds, riparian areas, aspen groves, cultural sites, ACECs, and mule deer winter ranges with authorization from the Field Office Manager, and only to protect human life, private property, structures, visitor safety, or other, sensitive or valuable resources

Wildland Fire Use (WFU) – not allowed in this FMU

Prescribed Fire and Non-Fire Treatments –

- No more than 3% of BLM lands (645 acres) are treated via prescribed fire and/or non-fire means over the 10-year period
- Treatment emphasis will be in WUI, old growth mixed conifer forest, areas invaded by cheat grass, and areas of pinyon pine encroachment into shrub steppe
- Prescribed fire emissions remain within those allowed by state and local air quality regulators

Post-Fire Rehabilitation and/or Restoration –

- Assess all wildland fires for rehabilitation and restoration needs
- Where rehabilitation and/or restoration are deemed necessary or desirable, successfully achieve slope stabilization, re-establishment of appropriate, site-specific native plant species, or other rehabilitation/restoration work in a timely manner
- Ensure that equipment and stabilization material, e.g. straw etc… are weed-free

Community Protection and Assistance Objectives (Mitigation and Prevention) –

- Increase public awareness, participation, and cooperation pertaining to the mitigation of fire threats in the WUI
- Educate area population on the basic principles of fire ecology and fire's role in the environment
- Build public support for fuels reduction efforts in and around WUI
- Collaborate with local fire departments and other entities and individuals regarding federal grants available to communities at-risk
- Develop and implement collaborative mitigation and prevention strategies with communities at risk
- Reduce the risk of human caused wildland fires, with special emphasis on recreationist-caused fires
- Improve rural and volunteer fire department readiness and fire fighting capacity

Fire Management Strategies in Coleville FMU

Suppression –

- Use Appropriate Management Response (AMR) to meet suppression objectives listed above, based on current conditions and fire location
- If the 1% (215 acres) decadal threshold for acres burned by wildland fire is met, a review of objectives and strategies will be initiated to develop new criteria for suppression of wildland fires and prescribed fire and non-fire fuels treatments
- Except where human life and private property are threatened, wildland fire managers will request and work closely with, a Resource Advisor for all wildland fires exceeding or expected to exceed initial attack suppression efforts
- In non-emergency situations, request an archeologist be present prior to any heavy equipment activity. In emergency circumstances, where heavy equipment must be employed, conduct post-fire archeological evaluations to assess and document equipment damage to resources.
- In cases where wildland fire threatens listed cultural resource properties, employ all available suppression and resource protection measures to avoid loss to the property. Contact the Bishop Field Office Manager and archeologist as soon as the threat to listed properties is recognized. Request an archeologist be dispatched to the incident as soon as practicable. Use care to avoid unintended damage to the listed property as a result of the suppression and protection efforts.

Wildland Fire Use (WFU) – not allowed in this FMU

Prescribed Fire and Non-Fire Treatments –

- Treat up to 3% of BLM lands (645 acres) via prescribed fire and/or non-fire means over the 10-year period
- An interdisciplinary approach is used to determine the best site-specific mix of prescribed fire and non-fire treatments to accomplish fuels reduction and other resource goals and objectives
- Conduct appropriate pre-treatment surveys (archeological, botanical, etc…) to ensure no unintended loss of other resource values
- Fire and fuels management specialists will work closely with in local air quality regulators to ensure prescribed fire emissions stay within permitted levels
- Use of herbicides as a vegetation treatment option will be carefully examined, for potential impacts to water sources, wildlife habitat, and cultural/traditional uses
- Consult with all affected Native American communities prior to any vegetation treatment of pinyon pine
- Conduct post-treatment surveys for increases in non-native plant species. If non-native species cover exceeds 5% in treated areas, implement appropriate eradication measures, as determined by an interdisciplinary effort.

Post-Fire Rehabilitation and/or Restoration –

- Implement post-fire rehabilitation and restoration efforts to facilitate slope stabilization, re-establishment of appropriate site-specific native plant species and reductions in cheat grass invasion
- Where rehabilitation and/or restoration are deemed necessary or desirable, successfully achieve slope stabilization, re-establishment of appropriate, site-specific native plant species, or other rehabilitation/restoration work in a timely manner
- Inspect equipment and stabilization material, e.g. straw etc. to ensure weed-free status

Community Protection and Assistance Strategies (Mitigation and Prevention) –

- Pursue formation of fire safe councils in all communities at risk.
- Work collaboratively with communities and other partners to develop a Community Wildfire Protection Plan (CWPP) and will update or amend the FMP as necessary to incorporate mitigation/prevention recommendations and priorities developed by the community or outlined in the CWPP.
- Work with US Forest Service prevention staff through an interagency agreement to make sure campsites and high use areas are patrolled and signs are maintained.
- Provide yearly fire prevention outreach materials to agencies offering campfire permits and general camping information to the public.
- Provide fire restriction and emergency closure information to the public.
- Present fire mitigation and prevention information to local K-12 schools at least once a year over the 5 year period and then re-evaluate the program to determine its effectiveness.
- Present fire ecology information to local youth groups to help enhance the understanding and support the BLM management activities.

- Coordinate information relating to funding and training opportunities to rural fire departments in order to enhance their fire fighting capacity.
- Provide informational brochures and materials to communities and homeowners on reducing fire risks. Provide Defensible Space fire education materials at events.
- Use local media outlets to encourage defensible space and to mitigate current fire causes.
- Produce mini campaigns each year to address the priority fire cause which may include some of the following: billboards, flyers, Fire Safe Council ads, and radio PSA's.
- Participate in residential assessments and provide education to the homeowners.
- Conduct presentations to local homeowner groups explaining "Defensible Space" and/or fire prevention risks and mitigation.

Bridgeport Valley – Bodie Hills FMU – CA170-002
FMU Type: WUI and Special Management Areas

Description of Bridgeport Valley – Bodie Hills FMU

Location – This 215,283-acre FMU is delineated by the headwaters of the East Walker River and the northern portion of the Mono Basin. Land ownership is 159,324 acres BLM, 3,285 acres State, and 52,674 acres private and other. This FMU encompasses both the Bridgeport Valley and Bodie Hills Management Areas, as defined in the Bishop RMP, plus that portion of the Granite Mountain Management Area lying north of State Highway 167, and the BLM land near the community of Mono City. This FMU includes Bodie Bowl, Conway Summit, and Travertine Hot Springs ACECs, as well as 5 WSAs (Masonic Mountain, Bodie Mountain, Mormon Meadow, Bodie, and Mount Biedeman).

Characteristics – This FMU consists of mountain ridges and slopes with well defined access routes. Elevations range from 6,400 ft. to 10,000 ft. Major plant community types in this FMU include pinyon pine woodlands, sagebrush steppe, mountain mahogany, mountain shrub, aspen, scattered lodgepole and limber pine stands, meadow and riparian. Cheat grass invasions have occurred in small portions of the FMU west of Virginia Creek, due to historic sheep bedding and grazing activities. Livestock grazing is comprised of cow-calf and sheep operations, and many allotments are operated under Coordinated Resource Management Plans.

Large portions of the FMU are at risk of catastrophic wildfire and cheat grass type conversion due to past fire suppression, livestock grazing, and climatic-driven increases in pinyon pine, which compromise key habitat for sage grouse and other sagebrush obligate species. Increased cover of pinyon pine can affect sagebrush– steppe community regeneration, production and compositional capacity by altering extant seed bank dynamics and increasing water and nutrient uptake. Post-fire, pinyon pine communities often convert to cheat grass dominated communities, especially in areas where native seed banks have reduced regenerative capacities due to competition from pinyon pine.

Soils are comprised primarily of volcanic, granitic and mixed alluvium parent materials. Erosion susceptibility is confined to drainages associated with roads and some aspen groves which receive heavy livestock bedding impacts. Other areas, such as mountain slopes, exhibit dense vegetation cover and are not currently at risk for soil erosion. There are numerous perennial and intermittent streams that bisect the FMU with soil textures ranging from rocky to loamy sand.

Fire History and Occurrence - In the period from 1980 thru 2002, 173 wildland fires occurred wholly or partially within this FMU, burning a total of 2,758 acres (includes acres burned outside the FMU boundary). Fire cause was 71% natural (lightning), 20% human-caused and 9% unknown. Fire size distribution for the Bridgeport Valley – Bodie Hills FMU is displayed in Table 3, below.

Table 3.

Fire Size Class	# of Fires	Acres Burned
A (0.25 ac. or less)	119	9.3
B (0.26 – 9.9 ac.)	42	108
C (10.0 – 99.9 ac.)	6	351
D (100 – 299 ac.)	3	563
E (300 – 999 ac.)	3	1,727
F (1,000 – 4,999 ac.)	0	0
G (5,000 + ac.)	0	0
Total	173	2,758

Normal fire season is May 1st thru October 31st.

Fuel Models, Weather/Climate, and Fire Behavior – Pinyon – juniper woodlands and shrub steppe dominate this FMU, and thus Fuel Model 6 applies to the vast majority of this area. Upland and riparian aspen stands make up much of the remaining area, and Fuel Model 9 applies to these areas.

Orographic influences of the Sierra Nevada significantly affect this FMU. Warm, dry summers are typical. Relative humidity is usually low, and live fuel moisture typically drops to 70 – 90% by late summer and early fall. Thunderstorms are common and frequently these storms produce little or no rain. Multiple ignitions caused by dry lightning are common during these periods. Additionally, these thunderstorms are usually accompanied by strong, erratic winds.

Fire behavior is generally moderate, but in the vicinity of thunderstorms or other periods of high wind, fire behavior readily becomes extreme. Daytime winds are normally upslope and up canyon, with late afternoon shifts to down slope, down canyon. Very strong winds associated with cold fronts moving through the area are not uncommon on the east side of the Sierra Nevada, particularly in the spring and fall.

Fire Regime and Condition Class (FR/CC) – Shrub steppe is 3/2 and 3/3. Pinyon - juniper woodlands are predominantly 3/3, with some 3/2. Aspen areas are 3/3.

Values at Risk – Bodie National Historic Landmark, Bodie State Historic Park, Dry Lakes Plateau National Register District, Conway Ranch (nominated for listing on National Register of Historic Places), arborglyphs, Bodie historical railroad grade and lime kiln, other scattered historical structures and sites, three ACECs (Travertine Hot Springs, Bodie Bowl, and Conway Summit), sage grouse habitat, mule deer habitat, pronghorn habitat, pygmy rabbit habitat, Lahontan cutthroat trout habitat, aspen and riparian habitat, rare plants, limber pine, loss of native plant species to conversion to cheat grass, forage for domestic livestock grazing, fences, five WSAs (Masonic Mountain, Bodie Mountain, Mormon Meadow, Bodie, and Mount Biedeman), Highway 395 Scenic Byway, private property, power line right-of-ways, and Potato Peak repeater site.

Human Environment/Communities at Risk - Communities in the Bridgeport Valley – Bodie Hills FMU are primarily comprised of permanent residents who live and work within the FMU or nearby commuting area. A few small, scattered summer-only communities also exist. Many homeowners recognize the need for and benefits from defensible space and community fuels reduction work. Traditional home defense brochures, press releases and flyers work well in this FMU. Posted flyers at local gathering places, such as post offices, general stores, or other businesses, serve as an excellent method for information distribution. The small town atmosphere helps spread information by word-of-mouth and e-mail. The audience consists of both permanent and seasonal residents, tourists, and ranchers.

Communities at risk include: Bridgeport, Conway Ranch, Mono City, Green Creek, Virginia Creek/Willow Springs, Bodie, Goat Ranch, and Highway 167 housing corridor. Three communities are in the early stages of fire safe council formation, and are active in planning and implementing fire projects.

Fire Management Objectives in Bridgeport Valley – Bodie Hills FMU

Suppression –

- No more than 2% of BLM lands (3,186 acres) are burned by wildland fire over the 10-year period
- At all Fire Intensity Levels (FIL), 90% of all unplanned ignitions are kept under 1 acre in size
- No loss of "Values at Risk" or "Communities at Risk" from wildland fire
- Fires on BLM land remain on BLM land – no crossover to private or other agency land
- The intensity of fire suppression effort is limited to the most economical response consistent with human and resource values at risk
- Bulldozers and other heavy equipment are only used in prominent viewsheds, riparian areas, aspen groves, cultural sites, ACECs, and mule deer winter ranges with authorization from the Field Office Manager, and only to protect human life, private property, structures, visitor safety, or other, sensitive or valuable resources

Wildland Fire Use (WFU) – not allowed in this FMU

Prescribed Fire and Non-Fire Treatments –

- No more than 15% of the BLM lands (23,899 acres) are treated via prescribed fire and/or non-fire means over the 10-year period
- Treatment emphasis will be in the WUI, areas of pinyon pine encroachment into shrub steppe, and upland and riparian aspen
- Prescribed fire emissions remain within those allowed by state and local air quality regulators

Post-Fire Rehabilitation and/or Restoration –

- Assess all wildland fires for rehabilitation and restoration needs
- Where rehabilitation and/or restoration are deemed necessary or desirable, successfully achieve slope stabilization, re-establishment of appropriate, site-specific native plant species, or other rehabilitation/restoration work in a timely manner
- Ensure that equipment and stabilization material, e.g. straw etc… are weed-free

Community Protection and Assistance Objectives (Mitigation and Prevention) –

- Increase public awareness, participation, and cooperation pertaining to the mitigation of fire threats in the WUI
- Educate area population on the basic principles of fire ecology and fire's role in the environment
- Build public support for fuels reduction efforts in and around WUI
- Collaborate with local fire departments and other entities and individuals regarding federal grants available to communities at-risk
- Develop and implement collaborative mitigation and prevention strategies with communities at risk
- Reduce the risk of human caused wildland fires, with special emphasis on recreationist-caused fires
- Improve rural and volunteer fire department readiness and fire fighting capacity

Fire Management Strategies in Bridgeport Valley – Bodie Hills FMU

Suppression –

- Use Appropriate Management Response (AMR) to meet suppression objectives listed above, based on current conditions and fire location
- If the 2% (3,186 acres) decadal threshold for acres burned by wildland fire is met, a review of objectives and strategies will be initiated to develop new criteria for suppression of wildland fires and prescribed fire and non-fire fuels treatments
- Except where human life and private property are threatened, wildland fire managers will request and work closely with, a Resource Advisor for all wildland fires exceeding or expected to exceed initial attack suppression efforts
- In non-emergency situations, request an archeologist be present prior to any heavy equipment activity. In emergency circumstances, where heavy equipment

must be employed, conduct post-fire archeological evaluations to assess and document equipment damage to resources.

- In cases where wildland fire threatens listed cultural resource properties, employ all available suppression and resource protection measures to avoid loss to the property. Contact the Bishop Field Office Manager and archeologist as soon as the threat to listed properties is recognized. Request an archeologist be dispatched to the incident as soon as practicable. Use care to avoid unintended damage to the listed property as a result of the suppression and protection efforts.

Wildland Fire Use (WFU) – not allowed in this FMU

Prescribed Fire and Non-Fire Treatments –

- Treat up to 15% of BLM lands (23,899 acres) via prescribed fire and/or non-fire means over the 10-year period
- An interdisciplinary approach is used to determine the best site-specific mix of prescribed fire and non-fire treatments to accomplish fuels reduction and other resource goals and objectives
- Conduct appropriate pre-treatment surveys (archeological, botanical, etc…) to ensure no unintended loss of other resource values
- Fire and fuels management specialists will work closely with in local air quality regulators to ensure prescribed fire emissions stay within permitted levels
- Use of herbicides as a vegetation treatment option will be carefully examined, for potential impacts to water sources, wildlife habitat, and cultural/traditional uses
- Consult with all affected Native American communities prior to any vegetation treatment of pinyon pine
- Conduct post-treatment surveys for increases in non-native plant species. If non-native species cover exceeds 5% in treated areas, implement appropriate eradication measures, as determined by an interdisciplinary effort.

Post-Fire Rehabilitation and/or Restoration –

- Implement post-fire rehabilitation and restoration efforts to facilitate slope stabilization, re-establishment of appropriate site-specific native plant species and reductions in cheat grass invasion
- Where rehabilitation and/or restoration are deemed necessary or desirable, successfully achieve slope stabilization, re-establishment of appropriate, site-specific native plant species, or other rehabilitation/restoration work in a timely manner
- Inspect equipment and stabilization material, e.g. straw etc. to ensure weed-free status

Community Protection and Assistance Strategies (Mitigation and Prevention) –

- Pursue formation of fire safe councils in all communities at risk.
- Work collaboratively with communities and other partners to develop a Community Wildfire Protection Plan (CWPP) and will update or amend the FMP as necessary to incorporate mitigation/prevention recommendations and priorities developed by the community or outlined in the CWPP.
- Work with US Forest Service prevention staff through an interagency agreement to make sure campsites and high use areas are patrolled and signs are maintained.
- Provide yearly fire prevention outreach materials to agencies offering campfire permits and general camping information to the public.
- Provide fire restriction and emergency closure information to the public.
- Present fire mitigation and prevention information to local K-12 schools at least once a year over the 5 year period and then re-evaluate the program to determine its effectiveness.
- Present fire ecology information to local youth groups to help enhance the understanding and support the BLM management activities.
- Coordinate information relating to funding and training opportunities to rural fire departments in order to enhance their fire fighting capacity.
- Provide informational brochures and materials to communities and homeowners on reducing fire risks. Provide Defensible Space fire education materials at events.
- Use local media outlets to encourage defensible space and to mitigate current fire causes.
- Produce mini campaigns each year to address the priority fire cause which may include some of the following: billboards, flyers, Fire Safe Council ads, and radio PSA's.
- Participate in residential assessments and provide education to the homeowners.
- Conduct presentations to local homeowner groups explaining "Defensible Space" and/or fire prevention risks and mitigation.

Granite Mountain FMU – CA170-003
FMU Type: High Value Habitat and Vegetation

Description of Granite Mountain FMU

Location – This 147,410-acre FMU includes the north and east portions of the Mono Basin, the Cowtrack Mountains, and Adobe Valley. Land ownership is 135,317 acres BLM, 2,791 acres State, and 9,302 acres private and other. This FMU encompasses the portion of the Granite Mountain Management Area lying south of State Highway 167 (not including the BLM land in the vicinity of Mono City), as defined in the Bishop RMP. This FMU includes three WSAs (Excelsior, Granite Mountain, and Walford Springs).

Characteristics – This FMU consists of mountain ridges, slopes and valleys with a mix of well defined and moderate to difficult access routes. Elevations range from 6,000 ft. to 8,000 ft. Major plant community types that comprise this FMU include pinyon pine woodlands, scattered Jeffrey pine stands, sagebrush steppe, including Wyoming sagebrush, mountain mahogany, mountain shrub, meadow and riparian. Uses include grazing and dispersed recreation.

Large portions of the FMU are at risk of catastrophic wildfire and cheat grass type conversion due to past fire suppression, livestock grazing, and climatic-driven increases in pinyon pine, which compromise key habitat for sage grouse and other sagebrush obligate species. Increased cover of pinyon pine can affect sagebrush– steppe community regeneration, production and compositional capacity by altering extant seed bank dynamics and increasing water and nutrient uptake. Post-fire, pinyon pine communities often convert to cheat grass dominated communities, especially in areas where native seed banks have reduced regenerative capacities due to competition from pinyon pine.

Soils are comprised primarily of volcanic, Lacustrine and mixed alluvium parent materials. Erosion susceptibility is confined to drainages associated with roads. Other areas, such as mountain slopes, exhibit dense vegetation cover and are not currently at risk for soil erosion. There are numerous intermittent streams that bisect the FMU with soil textures ranging from rocky to loamy sand.

Fire History and Occurrence - In the period from 1980 thru 2002, 63 wildland fires occurred wholly or partially within this FMU, burning a total of 3,993 acres (includes acres burned outside the FMU boundary). Fire cause was 87% natural (lightning), 10% human-caused and 3% unknown. Fire size distribution for the Granite Mountain FMU is displayed in Table 4, below.

Table 4.

Fire Size Class	# of Fires	Acres Burned
A (0.25 ac. or less)	49	4
B (0.26 – 9.9 ac.)	9	14
C (10.0 – 99.9 ac.)	3	145
D (100 – 299 ac.)	0	0
E (300 – 999 ac.)	1	850
F (1,000 – 4,999 ac.)	1	2,980
G (5,000 + ac.)	0	0
Total	63	3,993

Normal fire season is May 1st thru October 31st.

Fuel Models, Weather/Climate, and Fire Behavior – Pinyon – juniper woodlands and shrub steppe dominate this FMU, and thus Fuel Model 6 applies to the vast majority of this area.

Orographic influences of the Sierra Nevada significantly affect this FMU. Warm, dry summers are typical. Relative humidity is usually low, and live fuel moisture typically drops to 70 – 90% by late summer and early fall. Thunderstorms are common and frequently these storms produce little or no rain. Multiple ignitions caused by dry lightning are common during these periods. Additionally, these thunderstorms are usually accompanied by strong, erratic winds.

Fire behavior is generally moderate, but in the vicinity of thunderstorms or other periods of high wind, fire behavior readily becomes extreme. Daytime winds are normally upslope and up canyon, with late afternoon shifts to down slope, down canyon. Very strong winds associated with cold fronts moving through the area are not uncommon on the east side of the Sierra Nevada, particularly in the spring and fall.

Fire Regime and Condition Class (FR/CC) – Shrub steppe is 3/3 and some 3/2. Pinyon - juniper woodlands are predominantly 3/3.

Values at Risk – River Springs cultural sites, other known and unknown cultural sites, sage grouse habitat, pronghorn habitat, mule deer habitat, pygmy rabbit habitat, forage for domestic livestock and wild horse grazing, fences, Wyoming sagebrush, Jeffrey pine, chokecherries and other riparian species, loss of native plant species to conversion to cheat grass, three WSAs (Excelsior, Granite Mountain, and Walford Springs), viewshed associated with Mono Basin National Forest Scenic Area, private property, and power line right-of-ways.

Human Environment/Communities at Risk – No residential areas exist in this FMU. Recreational use is low, and is primarily Off-Highway Vehicle users, hunters, hikers and dispersed campers.

There are no communities at risk in this FMU.

Fire Management Objectives in Granite Mountain FMU

Suppression –

- No more than 2% of BLM lands (2,706 acres) are burned by wildland fire over the 10-year period
- At all Fire Intensity Levels (FIL), 90% of all unplanned ignitions are kept under 10 acres in size
- No loss of "Values at Risk" or "Communities at Risk" from wildland fire
- Fires on BLM land remain on BLM land – no crossover to private or other agency land
- The intensity of fire suppression effort is limited to the most economical response consistent with human and resource values at risk

- Bulldozers and other heavy equipment are only used in prominent viewsheds, riparian areas, aspen groves, cultural sites, ACECs, and mule deer winter ranges with authorization from the Field Office Manager, and only to protect human life, private property, structures, visitor safety, or other, sensitive or valuable resources

Wildland Fire Use (WFU) – not allowed in this FMU

Prescribed Fire and Non-Fire Treatments –

- No more than 10% of BLM land (13,532 acres) is treated via prescribed fire and/or non-fire means over the 10-year period
- Treatment emphasis will be in the pinyon – juniper woodlands, and areas of pinyon pine encroachment into shrub steppe
- Prescribed fire emissions remain within those allowed by state and local air quality regulators

Post-Fire Rehabilitation and/or Restoration –

- Assess all wildland fires for rehabilitation and restoration needs
- Where rehabilitation and/or restoration are deemed necessary or desirable, successfully achieve slope stabilization, re-establishment of appropriate, site-specific native plant species, or other rehabilitation/restoration work in a timely manner
- Ensure that equipment and stabilization material, e.g. straw etc… are weed-free

Community Protection and Assistance Objectives (Mitigation and Prevention) –

- Reduce the risk of human caused wildland fires, with special emphasis on recreationist-caused fires

Fire Management Strategies in Granite Mountain FMU

Suppression –

- Use Appropriate Management Response (AMR) to meet suppression objectives listed above, based on current conditions and fire location
- If the 2% (2,706 acres) decadal threshold for acres burned by wildland fire is met, a review of objectives and strategies will be initiated to develop new criteria for suppression of wildland fires and prescribed fire and non-fire fuels treatments
- Except where human life and private property are threatened, wildland fire managers will request and work closely with, a Resource Advisor for all wildland fires exceeding or expected to exceed initial attack suppression efforts
- In non-emergency situations, request an archeologist be present prior to any heavy equipment activity. In emergency circumstances, where heavy equipment must be employed, conduct post-fire archeological evaluations to assess and document equipment damage to resources.

- In cases where wildland fire threatens listed cultural resource properties, employ all available suppression and resource protection measures to avoid loss to the property. Contact the Bishop Field Office Manager and archeologist as soon as the threat to listed properties is recognized. Request an archeologist be dispatched to the incident as soon as practicable. Use care to avoid unintended damage to the listed property as a result of the suppression and protection efforts.

Wildland Fire Use (WFU) – not allowed in this FMU

Prescribed Fire and Non-Fire Treatments –

- Treat up to 10% of BLM lands (13,532 acres) via prescribed fire and/or non-fire means over the 10-year period
- An interdisciplinary approach is used to determine the best site-specific mix of prescribed fire and non-fire treatments to accomplish fuels reduction and other resource goals and objectives
- Conduct appropriate pre-treatment surveys (archeological, botanical, etc…) to ensure no unintended loss of other resource values
- Fire and fuels management specialists will work closely with in local air quality regulators to ensure prescribed fire emissions stay within permitted levels
- Use of herbicides as a vegetation treatment option will be carefully examined, for potential impacts to water sources, wildlife habitat, and cultural/traditional uses
- Consult with all affected Native American communities prior to any vegetation treatment of pinyon pine
- Conduct post-treatment surveys for increases in non-native plant species. If non-native species cover exceeds 5% in treated areas, implement appropriate eradication measures, as determined by an interdisciplinary effort.

Post-Fire Rehabilitation and/or Restoration –

- Implement post-fire rehabilitation and restoration efforts to facilitate slope stabilization, re-establishment of appropriate site-specific native plant species and reductions in cheat grass invasion
- Where rehabilitation and/or restoration are deemed necessary or desirable, successfully achieve slope stabilization, re-establishment of appropriate, site-specific native plant species, or other rehabilitation/restoration work in a timely manner
- Inspect equipment and stabilization material, e.g. straw etc. to ensure weed-free status

Community Protection and Assistance Strategies (Mitigation and Prevention) –

- Work with US Forest Service prevention staff through an interagency agreement to make sure campsites and high use areas are patrolled and signs are maintained.
- Provide yearly fire prevention outreach materials to agencies offering campfire permits and general camping information to the public.
- Provide fire restriction and emergency closure information to the public.

Long Valley FMU – CA170-004
FMU Type: WUI and High Value Habitat

Description of Long Valley FMU

Location – This 42,768-acre FMU surrounds Crowley Lake. Land ownership is 18,363 acres BLM, 22,765 acres LADWP, and 1,640 acres private and other. This FMU encompasses the entire Long Valley Management Area, as defined in the Bishop RMP.

Characteristics – This FMU encompasses the Long Valley Caldera, which contains slopes and ridges with well defined access routes. Elevations range from 7,000 ft. to 8,000 ft. Major plant community types in this FMU include sagebrush steppe, including Wyoming sagebrush, scattered Jeffrey pine stands, mountain mahogany, meadow and riparian. Thermal springs are scattered throughout the FMU. Use in this FMU consists of grazing (cow-calf operations) and high levels of recreational activity associated with the thermal spring systems.

Soils are comprised primarily of mixed alluvium and volcanic ash. Erosion susceptibility is slight for water and moderate for wind.

Fire History and Occurrence - In the period from 1980 thru 2002, 34 wildland fires occurred wholly or partially within this FMU, burning a total of 3.8 acres (includes acres burned outside the FMU boundary). Fire cause was 47% natural (lightning), 41% human-caused and 12% unknown. Fire size distribution for the Long Valley FMU is displayed in Table 5, below.

Table 5.

Fire Size Class	# of Fires	Acres Burned
A (0.25 ac. or less)	31	2.4
B (0.26 – 9.9 ac.)	3	1.4
C (10.0 – 99.9 ac.)	0	0
D (100 – 299 ac.)	0	0
E (300 – 999 ac.)	0	0
F (1,000 – 4,999 ac.)	0	0
G (5,000 + ac.)	0	0
Total	34	3.8

Normal fire season is May 1st thru October 31st.

Fuel Models, Weather/Climate, and Fire Behavior – Pinyon – juniper woodlands and shrub steppe dominate this FMU, and thus Fuel Model 6 applies to most of this area. Jeffrey pine forest with a shrub steppe understory is also present on Doe Ridge. Fuel Models 6 and 9 best represent this area, depending on the density of the Jeffrey pine overstory.

Orographic influences of the Sierra Nevada significantly affect this FMU. Warm, dry summers are typical. Relative humidity is usually low, and live fuel moisture typically drops to 70 – 90% by late summer and early fall. Thunderstorms are common and frequently these storms produce little or no rain. Multiple ignitions caused by dry lightning are common during these periods. Additionally, these thunderstorms are usually accompanied by strong, erratic winds.

Fire behavior is generally moderate, but in the vicinity of thunderstorms or other periods of high wind, fire behavior readily becomes extreme. Daytime winds are normally upslope and up canyon, with late afternoon shifts to down slope, down canyon. Very strong winds associated with cold fronts moving through the area are not uncommon on the east side of the Sierra Nevada, particularly in the spring and fall.

Fire Regime and Condition Class (FR/CC) – Shrub steppe is 3/2. Pinyon - juniper woodlands is 3/2. Jeffrey pine is 2/2 and 2/1.

Values at Risk – Sage grouse habitat, mule deer habitat, pygmy rabbit habitat, Wyoming big sagebrush, rare plants, Jeffrey pine, riparian habitat, loss of native plant species to conversion to cheat grass, known and unknown cultural sites, forage for domestic livestock grazing, fences, campgrounds and recreational hot springs sites, Scenic Byway and other visual resources, water quality (City of Los Angeles aqueduct system), Mammoth – Yosemite Airport, Whitmore Pools, other public and private property and structures, power line right-of-ways, and radio towers.

Human Environment/Communities at Risk - Communities in the Long Valley FMU are primarily comprised of permanent residents who live and work within the FMU or nearby commuting area, second-homeowners from southern California, and seasonal influxes of tourists. Extensive recent development has occurred on private land in this FMU, and many new homes have been built or are planned to be built. Many homeowners recognize the need for and benefits from defensible space and community fuels reduction work. Most residents can be reached through the various media outlets based in Mammoth Lakes. Traditional home defense brochures, press releases and flyers work well in this FMU. Posted flyers at local gathering places, such as post offices, general stores, or other businesses, serve as an excellent method for information distribution. The audience consists of both permanent and seasonal residents, and tourists.

Communities at risk include: Aspen Springs, Crowley Lake, Hilton Creek, and McGee Creek. One community (Crowley Lake) is in the early stages of fire safe council formation.

Fire Management Objectives in Long Valley FMU

Suppression –

- No more than 1% of BLM lands (184 acres) are burned by wildland fire over the 10-year period
- At all Fire Intensity Levels (FIL), 90% of all unplanned ignitions are kept under 1 acre in size
- No loss of "Values at Risk" or "Communities at Risk" from wildland fire
- Fires on BLM land remain on BLM land – no crossover to private or other agency land
- The intensity of fire suppression effort is limited to the most economical response consistent with human and resource values at risk
- Bulldozers and other heavy equipment are only used in prominent viewsheds, riparian areas, aspen groves, cultural sites, ACECs, and mule deer winter ranges with authorization from the Field Office Manager, and only to protect human life, private property, structures, visitor safety, or other, sensitive or valuable resources

Wildland Fire Use (WFU) – not allowed in this FMU

Prescribed Fire and Non-Fire Treatments –

- No more than 5% of BLM lands (918 acres) are treated via prescribed fire and/or non-fire means over the 10-year period
- Treatment emphasis will be in the WUI and for the protection and enhancement of sensitive plant and animal species
- Prescribed fire emissions remain within those allowed by state and local air quality regulators

Post-Fire Rehabilitation and/or Restoration –

- Assess all wildland fires for rehabilitation and restoration needs
- Where rehabilitation and/or restoration are deemed necessary or desirable, successfully achieve slope stabilization, re-establishment of appropriate, site-specific native plant species, or other rehabilitation/restoration work in a timely manner
- Ensure that equipment and stabilization material, e.g. straw etc… are weed-free

Community Protection and Assistance Objectives (Mitigation and Prevention) –

- Increase public awareness, participation, and cooperation pertaining to the mitigation of fire threats in the WUI
- Educate area population on the basic principles of fire ecology and fire's role in the environment
- Build public support for fuels reduction efforts in and around WUI
- Collaborate with local fire departments and other entities and individuals regarding federal grants available to communities at-risk

- Develop and implement collaborative mitigation and prevention strategies with communities at risk
- Reduce the risk of human caused wildland fires, with special emphasis on recreationist-caused fires
- Improve rural and volunteer fire department readiness and fire fighting capacity

Fire Management Strategies in Long Valley FMU

Suppression –

- Use Appropriate Management Response (AMR) to meet suppression objectives listed above, based on current conditions and fire location
- If the 1% (184 acres) decadal threshold for acres burned by wildland fire is met, a review of objectives and strategies will be initiated to develop new criteria for suppression of wildland fires and prescribed fire and non-fire fuels treatments
- Except where human life and private property are threatened, wildland fire managers will request and work closely with, a Resource Advisor for all wildland fires exceeding or expected to exceed initial attack suppression efforts
- In non-emergency situations, request an archeologist be present prior to any heavy equipment activity. In emergency circumstances, where heavy equipment must be employed, conduct post-fire archeological evaluations to assess and document equipment damage to resources.
- In cases where wildland fire threatens listed cultural resource properties, employ all available suppression and resource protection measures to avoid loss to the property. Contact the Bishop Field Office Manager and archeologist as soon as the threat to listed properties is recognized. Request an archeologist be dispatched to the incident as soon as practicable. Use care to avoid unintended damage to the listed property as a result of the suppression and protection efforts.

Wildland Fire Use (WFU) – not allowed in this FMU

Prescribed Fire and Non-Fire Treatments –

- Treat up to 5% of BLM lands (918 acres) via prescribed fire and/or non-fire means over the 10-year period
- An interdisciplinary approach is used to determine the best site-specific mix of prescribed fire and non-fire treatments to accomplish fuels reduction and other resource goals and objectives
- Conduct appropriate pre-treatment surveys (archeological, botanical, etc…) to ensure no unintended loss of other resource values
- Fire and fuels management specialists will work closely with in local air quality regulators to ensure prescribed fire emissions stay within permitted levels
- Use of herbicides as a vegetation treatment option will be carefully examined, for potential impacts to water sources, wildlife habitat, and cultural/traditional uses
- Consult with all affected Native American communities prior to any vegetation treatment of pinyon pine

- Conduct post-treatment surveys for increases in non-native plant species. If non-native species cover exceeds 5% in treated areas, implement appropriate eradication measures, as determined by an interdisciplinary effort.

Post-Fire Rehabilitation and/or Restoration –

- Implement post-fire rehabilitation and restoration efforts to facilitate slope stabilization, re-establishment of appropriate site-specific native plant species and reductions in cheat grass invasion
- Where rehabilitation and/or restoration are deemed necessary or desirable, successfully achieve slope stabilization, re-establishment of appropriate, site-specific native plant species, or other rehabilitation/restoration work in a timely manner
- Inspect equipment and stabilization material, e.g. straw etc. to ensure weed-free status

Community Protection and Assistance Strategies (Mitigation and Prevention) –

- Pursue formation of fire safe councils in all communities at risk.
- Work collaboratively with communities and other partners to develop a Community Wildfire Protection Plan (CWPP) and will update or amend the FMP as necessary to incorporate mitigation/prevention recommendations and priorities developed by the community or outlined in the CWPP.
- Work with US Forest Service prevention staff through an interagency agreement to make sure campsites and high use areas are patrolled and signs are maintained.
- Provide yearly fire prevention outreach materials to agencies offering campfire permits and general camping information to the public.
- Provide fire restriction and emergency closure information to the public.
- Present fire mitigation and prevention information to local K-12 schools at least once a year over the 5 year period and then re-evaluate the program to determine its effectiveness.
- Present fire ecology information to local youth groups to help enhance the understanding and support the BLM management activities.
- Coordinate information relating to funding and training opportunities to rural fire departments in order to enhance their fire fighting capacity.
- Provide informational brochures and materials to communities and homeowners on reducing fire risks. Provide Defensible Space fire education materials at events.
- Use local media outlets to encourage defensible space and to mitigate current fire causes.
- Produce mini campaigns each year to address the priority fire cause which may include some of the following: billboards, flyers, Fire Safe Council ads, and radio PSA's.
- Participate in residential assessments and provide education to the homeowners.
- Conduct presentations to local homeowner groups explaining "Defensible Space" and/or fire prevention risks and mitigation.

Benton FMU – CA170-005
FMU Type: WUI and Special Management Areas

Description of Benton FMU

Location – This 218,957-acre FMU surrounds the Benton, Hammil, and Chalfant Valleys of Mono and Inyo Counties. Land ownership is 178,556 acres BLM, 19,638 acres LADWP, 2,474 acres State, and 18,289 acres private and other. The Volcanic Tablelands, delineated by the Bishop Tuff geologic formation and the associated Fish Slough ACEC wetland constitute important management areas within this FMU. This FMU includes four WSAs (Chidago Canyon, Fish Slough, Volcanic Tablelands, and Casa Diablo).

Characteristics – This FMU consists of volcanic flows, upland slopes, ridges and valleys, with generally well defined access routes. Elevations range from 4,000 ft. to 7,000 ft. Major plant community types that comprise this FMU include pinyon pine woodlands, sagebrush steppe, including Wyoming sagebrush, saltbush scrub, shadscale scrub, alkali meadow and riparian. Uses include grazing and dispersed recreation.

Soils are comprised primarily of granitic and volcanic parent material that are well drained and slightly to moderately susceptible to erosion. There are numerous small canyons and ephemeral drainages that bisect the FMU. Soils within the drainages are rocky to loamy sand in texture.

Fire History and Occurrence - In the period from 1980 thru 2002, 82 wildland fires occurred wholly or partially within this FMU, burning a total of 271 acres (includes acres burned outside the FMU boundary). Fire cause was 39% natural (lightning), 49% human-caused and 12% unknown. Fire size distribution for the Bento FMU is displayed in Table 6, below.

Table 6.

Fire Size Class	# of Fires	Acres Burned
A (0.25 ac. or less)	68	4.5
B (0.26 – 9.9 ac.)	11	16.5
C (10.0 – 99.9 ac.)	2	35
D (100 – 299 ac.)	1	215
E (300 – 999 ac.)	0	0
F (1,000 – 4,999 ac.)	0	0
G (5,000 + ac.)	0	0
Total	68	271

Normal fire season is April 1st thru November 31st.

Fuel Models, Weather/Climate, and Fire Behavior – Pinyon – juniper woodlands, shrub steppe and desert scrub dominate this FMU. There is a small meadow component in the vicinity of Fish Slough. Fuel Model 6 applies to nearly all of this area.

Orographic influences of the Sierra Nevada and White Mountains significantly affect this FMU. Warm, dry summers are typical. Relative humidity is usually low, and live fuel moisture typically drops to 50 – 70% by late summer and early fall. Thunderstorms are common and frequently these storms produce little or no rain. Multiple ignitions caused by dry lightning are common during these periods. Additionally, these thunderstorms are usually accompanied by strong, erratic winds.

Fire behavior is generally moderate, but in the vicinity of thunderstorms or other periods of high wind, fire behavior readily becomes extreme. Daytime winds are normally upslope and up canyon, with late afternoon shifts to down slope, down canyon. Very strong winds associated with cold fronts moving through the area are not uncommon on the east side of the Sierra Nevada, particularly in the spring and fall.

Fire Regime and Condition Class (FR/CC) – Pinyon - juniper woodlands are 3/2 and 3/3. Shrub steppe is 3/2. Desert scrub is 3/1.

Values at Risk – Mule deer winter range, desert pupfish habitat, rare plants, Wyoming sagebrush, riparian habitat, loss of native plant species to conversion to cheat grass, known and unknown cultural sites, Chalfant Petroglyphs National Register Site, Yellow Jacket National Register Site, Carson and Colorado historic railroad grade, stage coach route, forage for domestic livestock grazing, fences, recreational and visual qualities, Fish Slough ACEC, four WSAs (Chidago Canyon, Fish Slough, Volcanic Tablelands, and Casa Diablo), private property and structures, and power line right-of-ways.

Human Environment/Communities at Risk – The numerous small communities in the Benton FMU are primarily comprised of permanent residents who live and work within the FMU or nearby commuting area. Some recent development has occurred on private land in this FMU, and additional new homes are planned to be built. Many homeowners recognize the need for and benefits from defensible space and community fuels reduction work. Most residents can be reached through the various media outlets based in Bishop. Traditional home defense brochures, press releases and flyers work well in this FMU. Posted flyers at local gathering places, such as post offices, general stores, or other businesses, serve as an excellent method for information distribution. The small town atmosphere helps spread information by word-of-mouth and e-mail. The audience consists mainly of permanent residents, many of whom are ranchers, and recreationists.

Communities at risk include: Benton Hot Springs, Benton, Benton Indian Reservation, Hammil Valley, Chalfant Valley, White Mountain Estates, Rudolph Ranch, dozens of scattered ranches in the Tri Valley area, and isolated homes at Yellowjacket Spring and on Volcanic Tableland. One community (Chalfant Valley) has formed a fire safe council and has implemented fuels reduction projects.

Fire Management Objectives in Benton FMU

Suppression –

- No more than 2% of BLM lands (3,571 acres) are burned by wildland fire over the 10-year period
- At all Fire Intensity Levels (FIL), 90% of all unplanned ignitions are kept under 1 acre in size
- No loss of "Values at Risk" or "Communities at Risk" from wildland fire
- Fires on BLM land remain on BLM land – no crossover to private or other agency land
- The intensity of fire suppression effort is limited to the most economical response consistent with human and resource values at risk
- Bulldozers and other heavy equipment are only used in prominent viewsheds, riparian areas, aspen groves, cultural sites, ACECs, and mule deer winter ranges with authorization from the Field Office Manager, and only to protect human life, private property, structures, visitor safety, or other, sensitive or valuable resources

Wildland Fire Use (WFU) – not allowed in this FMU

Prescribed Fire and Non-Fire Treatments –

- No more than 10% of BLM lands (17,855 acres) is treated via prescribed fire and/or non-fire means over the 10-year period
- Use prescribed fire to burn approximately 25 acres of Fish Slough ACEC, Zone 1, every 3 three years
- Treatment emphasis will be in the WUI and for the protection and enhancement of sensitive plant and animal species, including mule deer winter range
- Treatment in desert scrub is minimal, outside of WUI
- Prescribed fire emissions remain within those allowed by state and local air quality regulators

Post-Fire Rehabilitation and/or Restoration –

- Assess all wildland fires for rehabilitation and restoration needs
- Where rehabilitation and/or restoration are deemed necessary or desirable, successfully achieve slope stabilization, re-establishment of appropriate, site-specific native plant species, or other rehabilitation/restoration work in a timely manner
- Ensure that equipment and stabilization material, e.g. straw etc… are weed-free

Community Protection and Assistance Objectives (Mitigation and Prevention) –

- Increase public awareness, participation, and cooperation pertaining to the mitigation of fire threats in the WUI
- Educate area population on the basic principles of fire ecology and fire's role in the environment
- Build public support for fuels reduction efforts in and around WUI

- Collaborate with local fire departments and other entities and individuals regarding federal grants available to communities at-risk
- Develop and implement collaborative mitigation and prevention strategies with communities at risk
- Reduce the risk of human caused wildland fires, with special emphasis on recreationist-caused fires
- Improve rural and volunteer fire department readiness and fire fighting capacity

Fire Management Strategies in Benton FMU

Suppression –

- Use Appropriate Management Response (AMR) to meet suppression objectives listed above, based on current conditions and fire location
- If the 2% (3,571 acres) decadal threshold for acres burned by wildland fire is met, a review of objectives and strategies will be initiated to develop new criteria for suppression of wildland fires and prescribed fire and non-fire fuels treatments
- Except where human life and private property are threatened, wildland fire managers will request and work closely with, a Resource Advisor for all wildland fires exceeding or expected to exceed initial attack suppression efforts
- In non-emergency situations, request an archeologist be present prior to any heavy equipment activity. In emergency circumstances, where heavy equipment must be employed, conduct post-fire archeological evaluations to assess and document equipment damage to resources.
- In cases where wildland fire threatens listed cultural resource properties, employ all available suppression and resource protection measures to avoid loss to the property. Contact the Bishop Field Office Manager and archeologist as soon as the threat to listed properties is recognized. Request an archeologist be dispatched to the incident as soon as practicable. Use care to avoid unintended damage to the listed property as a result of the suppression and protection efforts.

Wildland Fire Use (WFU) – not allowed in this FMU

Prescribed Fire and Non-Fire Treatments –

- Treat up to 10% of BLM lands (17,855 acres) via prescribed fire and/or non-fire means over the 10-year period
- An interdisciplinary approach is used to determine the best site-specific mix of prescribed fire and non-fire treatments to accomplish fuels reduction and other resource goals and objectives
- Conduct appropriate pre-treatment surveys (archeological, botanical, etc…) to ensure no unintended loss of other resource values
- Fire and fuels management specialists will work closely with in local air quality regulators to ensure prescribed fire emissions stay within permitted levels

- Use of herbicides as a vegetation treatment option will be carefully examined, for potential impacts to water sources, wildlife habitat, and cultural/traditional uses
- Consult with all affected Native American communities prior to any vegetation treatment of pinyon pine
- Conduct post-treatment surveys for increases in non-native plant species. If non-native species cover exceeds 5% in treated areas, implement appropriate eradication measures, as determined by an interdisciplinary effort.

Post-Fire Rehabilitation and/or Restoration –

- Implement post-fire rehabilitation and restoration efforts to facilitate slope stabilization, re-establishment of appropriate site-specific native plant species and reductions in cheat grass invasion
- Where rehabilitation and/or restoration are deemed necessary or desirable, successfully achieve slope stabilization, re-establishment of appropriate, site-specific native plant species, or other rehabilitation/restoration work in a timely manner
- Inspect equipment and stabilization material, e.g. straw etc. to ensure weed-free status

Community Protection and Assistance Strategies (Mitigation and Prevention) –

- Pursue formation of fire safe councils in all communities at risk.
- Work collaboratively with communities and other partners to develop a Community Wildfire Protection Plan (CWPP) and will update or amend the FMP as necessary to incorporate mitigation/prevention recommendations and priorities developed by the community or outlined in the CWPP.
- Work with US Forest Service prevention staff through an interagency agreement to make sure campsites and high use areas are patrolled and signs are maintained.
- Provide yearly fire prevention outreach materials to agencies offering campfire permits and general camping information to the public.
- Provide fire restriction and emergency closure information to the public.
- Present fire mitigation and prevention information to local K-12 schools at least once a year over the 5 year period and then re-evaluate the program to determine its effectiveness.
- Present fire ecology information to local youth groups to help enhance the understanding and support the BLM management activities.
- Coordinate information relating to funding and training opportunities to rural fire departments in order to enhance their fire fighting capacity.
- Provide informational brochures and materials to communities and homeowners on reducing fire risks. Provide Defensible Space fire education materials at events.
- Use local media outlets to encourage defensible space and to mitigate current fire causes.

- Produce mini campaigns each year to address the priority fire cause which may include some of the following: billboards, flyers, Fire Safe Council ads, and radio PSA's.
- Participate in residential assessments and provide education to the homeowners.
- Conduct presentations to local homeowner groups explaining "Defensible Space" and/or fire prevention risks and mitigation.

Owens Valley FMU – CA170-006
FMU Type: WUI and Special Management Areas

Description of Owens Valley FMU

Location – This 506,859-acre FMU includes the lower alluvial fans surrounding the Owens Valley in Inyo County. Land ownership is 189,861 acres BLM, 225,154 acres LADWP, and 91,844 acres private and other. This FMU contains the communities of Bishop, Big Pine, Independence, and Lone Pine. This FMU includes the Crater Mountain ACEC and five WSAs (Cerro Gordo, Southern Inyo, Independence Creek, Crater Mountain, and Symmes Creek).

Characteristics – This FMU consists of volcanic flows, upland slopes, and valleys with generally well defined access routes. Elevations range from 2,500 ft. to 5,000 ft. Major plant community types in this FMU include pinyon pine woodlands, saltbush scrub, shadscale scrub, sagebrush steppe, alkali meadow and riparian. Use in this FMU includes grazing and dispersed recreation.

Soils are comprised primarily of granitic and volcanic parent material that are well drained and slightly to moderately susceptible to erosion. There are numerous perennial drainages that bisect the FMU. The drainages are narrow and soils are generally rocky in texture.

Fire History and Occurrence - In the period from 1980 thru 2002, 163 wildland fires occurred wholly or partially within this FMU, burning a total of 30,074 acres (includes acres burned outside the FMU boundary). Fire cause was 22% natural (lightning), 60% human-caused and 18% unknown. Fire size distribution for the Owens Valley FMU is displayed in Table 7, below.

Table 7.

Fire Size Class	# of Fires	Acres Burned
A (0.25 ac. or less)	108	7.0
B (0.26 – 9.9 ac.)	32	50.7
C (10.0 – 99.9 ac.)	9	437
D (100 – 299 ac.)	5	743
E (300 – 999 ac.)	4	2,546
F (1,000 – 4,999 ac.)	2	4,540
G (5,000 + ac.)	3	21,750
Total	162	30,074

Normal fire season is April 1st thru November 31st.

Fuel Models, Weather/Climate, and Fire Behavior – Desert scrub, shrub steppe, and pinyon – juniper woodlands dominate this FMU. There is also an alkali flat component at the southern end of this FMU. Fuel Model 6 applies to nearly all of this area.

Orographic influences of the Sierra Nevada and White Mountains/Inyo Mountains significantly affect this FMU. Spring can be extremely windy, and many large, damaging, wind-driven fires have occurred in this FMU during the spring months. Summers are typically hot and dry, with low to very low relative humidity, and live fuel moisture typically drops to 30 – 40% by late summer and early fall. Thunderstorms are common and frequently these storms produce little or no rain. Multiple ignitions caused by dry lightning are common during these periods. Additionally, these thunderstorms are usually accompanied by strong, erratic winds.

Fire behavior is generally moderate, but in the vicinity of thunderstorms or other periods of high wind, fire behavior readily becomes extreme. Daytime winds are normally upslope and up canyon, with late afternoon shifts to down slope, down canyon. Very strong winds associated with cold fronts moving through the area are not uncommon on the east side of the Sierra Nevada, particularly in the spring and fall.

Fire Regime and Condition Class (FR/CC) – Pinyon - juniper woodlands are 3/2 and 3/3. Shrub steppe is 3/2 and 3/3. Desert scrub is 3/1.

Values at Risk – Mule deer winter range, Owens Valley vole habitat, rare plants, oak trees, ash trees, Joshua trees, riparian habitat, loss of native plant species to conversion to cheat grass, known and unknown cultural sites, Cerro Gordo site, Manzanar National Monument, Keeler Dunes, Soda Plant National Register District at Keeler, Carson and Colorado historic railroad grade, forage for domestic livestock grazing, fences, recreational and visual qualities, Alabama Hills Special Recreation Management Area (SRMA), campgrounds, Crater Mountain ACEC, five WSAs (Cerro Gordo, Southern Inyo, Independence Creek, Crater Mountain, and Symmes Creek), private property and structures, and power line right-of-ways.

Human Environment/Communities at Risk - Communities in the Owens Valley FMU are primarily comprised of permanent residents who live and work within the FMU or nearby commuting area. This FMU includes Bishop, the largest community in the eastern Sierra region. Numerous other smaller communities also exist. The communities in this FMU are fairly stable, featuring many families and retirees. Seasonal influxes of tourists are substantial. Many homeowners recognize the need for and benefits from defensible space and community fuels reduction work. Most residents can be reached through the various media outlets based in Bishop. Traditional home defense brochures, press releases and flyers work well in this FMU. Posted flyers at local gathering places, such as post offices, general stores, or other businesses, serve as an excellent method for information distribution. The small town atmosphere helps spread information by word-of-mouth and e-mail. More challenging is reaching the tourists who come from outside the area to recreate on public lands. The audience consists mainly of permanent residents and tourists.

Communities at risk include: Swall Meadows, Paradise, Round Valley, Forty Acres, Rovana, Mustang Mesa, Rocking K, Chipmunk Canyon, Bishop, Wilkerson, Keough's Hot Springs, Big Pine, Fort Independence, Independence, Birch Creek, Lone Pine, Aberdeen, Olancha, Keeler, Cartago, Alabama Hills, Granite View, Seven Pines, and Oak Creek. Several fire safe councils are already operating in these Owens Valley communities.

Fire Management Objectives in Owens Valley FMU

Suppression –

- No more than 2% of BLM lands (3,797 acres) are burned by wildland fire over the 10-year period
- At all Fire Intensity Levels (FIL), 90% of all unplanned ignitions are kept under 1 acre in size
- No loss of "Values at Risk" or "Communities at Risk" from wildland fire
- Fires on BLM land remain on BLM land – no crossover to private or other agency land
- The intensity of fire suppression effort is limited to the most economical response consistent with human and resource values at risk
- Bulldozers and other heavy equipment are only used in prominent viewsheds, riparian areas, aspen groves, cultural sites, ACECs, and mule deer winter ranges with authorization from the Field Office Manager, and only to protect human life, private property, structures, visitor safety, or other, sensitive or valuable resources

Wildland Fire Use (WFU) – not allowed in this FMU

Prescribed Fire and Non-Fire Treatments –

- No more than 3% of BLM lands (5,696 acres) is treated via prescribed fire and/or non-fire means over the 10-year period
- Treatment emphasis will be in the WUI and for the protection and enhancement of sensitive plant and animal species, including mule deer winter range
- Treatment in desert scrub is minimal, outside of WUI
- Prescribed fire emissions remain within those allowed by state and local air quality regulators

Post-Fire Rehabilitation and/or Restoration –

- Assess all wildland fires for rehabilitation and restoration needs
- Where rehabilitation and/or restoration are deemed necessary or desirable, successfully achieve slope stabilization, re-establishment of appropriate, site-specific native plant species, or other rehabilitation/restoration work in a timely manner
- Ensure that equipment and stabilization material, e.g. straw etc… are weed-free

Community Protection and Assistance Objectives (Mitigation and Prevention) –

- Increase public awareness, participation, and cooperation pertaining to the mitigation of fire threats in the WUI
- Educate area population on the basic principles of fire ecology and fire's role in the environment
- Build public support for fuels reduction efforts in and around WUI
- Collaborate with local fire departments and other entities and individuals regarding federal grants available to communities at-risk
- Develop and implement collaborative mitigation and prevention strategies with communities at risk
- Reduce the risk of human caused wildland fires, with special emphasis on recreationist-caused fires
- Improve rural and volunteer fire department readiness and fire fighting capacity

Fire Management Strategies in Owens Valley FMU

Suppression –

- Use Appropriate Management Response (AMR) to meet suppression objectives listed above, based on current conditions and fire location
- If the 2% (3,797 acres) decadal threshold for acres burned by wildland fire is met, a review of objectives and strategies will be initiated to develop new criteria for suppression of wildland fires and prescribed fire and non-fire fuels treatments
- Except where human life and private property are threatened, wildland fire managers will request and work closely with, a Resource Advisor for all wildland fires exceeding or expected to exceed initial attack suppression efforts
- In non-emergency situations, request an archeologist be present prior to any heavy equipment activity. In emergency circumstances, where heavy equipment must be employed, conduct post-fire archeological evaluations to assess and document equipment damage to resources.
- In cases where wildland fire threatens listed cultural resource properties, employ all available suppression and resource protection measures to avoid loss to the property. Contact the Bishop Field Office Manager and archeologist as soon as the threat to listed properties is recognized. Request an archeologist be dispatched to the incident as soon as practicable. Use care to avoid unintended damage to the listed property as a result of the suppression and protection efforts.

Wildland Fire Use (WFU) – not allowed in this FMU

Prescribed Fire and Non-Fire Treatments –

- Treat up to 3% of BLM lands (5,696 acres) via prescribed fire and/or non-fire means over the 10-year period
- Treatment emphasis is in the WUI, pinyon – juniper, and shrub steppe vegetation types
- An interdisciplinary approach is used to determine the best site-specific mix of prescribed fire and non-fire treatments to accomplish fuels reduction and other resource goals and objectives
- Conduct appropriate pre-treatment surveys (archeological, botanical, etc…) to ensure no unintended loss of other resource values
- Fire and fuels management specialists will work closely with in local air quality regulators to ensure prescribed fire emissions stay within permitted levels
- Use of herbicides as a vegetation treatment option will be carefully examined, for potential impacts to water sources, wildlife habitat, and cultural/traditional uses
- Consult with all affected Native American communities prior to any vegetation treatment of pinyon pine
- Conduct post-treatment surveys for increases in non-native plant species. If non-native species cover exceeds 5% in treated areas, implement appropriate eradication measures, as determined by an interdisciplinary effort.

Post-Fire Rehabilitation and/or Restoration –

- Implement post-fire rehabilitation and restoration efforts to facilitate slope stabilization, re-establishment of appropriate site-specific native plant species and reductions in cheat grass invasion
- Where rehabilitation and/or restoration are deemed necessary or desirable, successfully achieve slope stabilization, re-establishment of appropriate, site-specific native plant species, or other rehabilitation/restoration work in a timely manner
- Inspect equipment and stabilization material, e.g. straw etc. to ensure weed-free status

Community Protection and Assistance Strategies (Mitigation and Prevention) –

- Pursue formation of fire safe councils in all communities at risk.
- Work collaboratively with communities and other partners to develop a Community Wildfire Protection Plan (CWPP) and will update or amend the FMP as necessary to incorporate mitigation/prevention recommendations and priorities developed by the community or outlined in the CWPP.
- Work with US Forest Service prevention staff through an interagency agreement to make sure campsites and high use areas are patrolled and signs are maintained.
- Provide yearly fire prevention outreach materials to agencies offering campfire permits and general camping information to the public.
- Provide fire restriction and emergency closure information to the public.
- Present fire mitigation and prevention information to local K-12 schools at least once a year over the 5 year period and then re-evaluate the program to determine its effectiveness.

- Present fire ecology information to local youth groups to help enhance the understanding and support the BLM management activities.
- Coordinate information relating to funding and training opportunities to rural fire departments in order to enhance their fire fighting capacity.
- Provide informational brochures and materials to communities and homeowners on reducing fire risks. Provide Defensible Space fire education materials at events.
- Use local media outlets to encourage defensible space and to mitigate current fire causes.
- Produce mini campaigns each year to address the priority fire cause which may include some of the following: billboards, flyers, Fire Safe Council ads, and radio PSA's.
- Participate in residential assessments and provide education to the homeowners.
- Conduct presentations to local homeowner groups explaining "Defensible Space" and/or fire prevention risks and mitigation.

Inyo Mountains Wilderness FMU – CA170-007
FMU Type: Wilderness (WFU) and Cultural/Historical

Description of Inyo Mountains Wilderness FMU

Location – This 45,374-acre FMU is located east of the Owens Valley and encompasses the Inyo Mountain range that includes the Inyo Mountains Wilderness and the Keynot Peak ACEC. Land ownership is 45,020 acres BLM and 354 acres private and other.

Characteristics – This FMU consists of mountains, ridges and upland slopes with difficult 4-wheel drive access routes. Elevations range from 4,000 ft. to 9,000 ft. Major plant community types that comprise this FMU include shadscale scrub, sagebrush steppe, mountain shrub, mountain mahogany, limber pine, pinyon pine woodlands and bristlecone pine. Use in this FMU is limited, and mainly consists of dispersed recreation.

Soils are comprised primarily of calcareous and metamorphic parent materials that are well drained and slightly to moderately susceptible to erosion. There are numerous intermittent drainages that bisect the FMU. The drainages are narrow and soils are generally rocky to sandy loam in texture.

Fire History and Occurrence - In the period from 1980 thru 2002, 1 wildland fire occurred wholly or partially within this FMU, burning a total of 0.1 acres (includes acres burned outside the FMU boundary). Fire cause was 0% natural (lightning), 100% human-caused and 0% unknown. Fire size distribution for the Inyo Mountains Wilderness FMU is displayed in Table 8, below.

Table 8.

Fire Size Class	# of Fires	Acres Burned
A (0.25 ac. or less)	1	0.1
B (0.26 – 9.9 ac.)	0	0
C (10.0 – 99.9 ac.)	0	0
D (100 – 299 ac.)	0	0
E (300 – 999 ac.)	0	0
F (1,000 – 4,999 ac.)	0	0
G (5,000 + ac.)	0	0
Total	1	0.1

Normal fire season is May 1st and October 31st.

Fuel Models, Weather/Climate, and Fire Behavior – Pinyon – juniper woodlands, shrub steppe, and desert scrub dominate this FMU, and thus Fuel Model 6 applies to the vast majority of this area. A narrow band of bristlecone pine forest exists along the Inyo Mountains ridge line. Fuel Model 8 best represents the conditions found in this area.

Orographic influences of the Inyo Mountains and the Sierra Nevada significantly affect this FMU. Warm, dry summers are typical. Relative humidity is usually low, and live fuel moisture typically drops to 40 – 60% by late summer and early fall. Thunderstorms are common and frequently these storms produce little or no rain. Multiple ignitions caused by dry lightning are likely during these periods. Additionally, these thunderstorms are usually accompanied by strong, erratic winds.

Fire behavior is generally moderate, but in the vicinity of thunderstorms or other periods of high wind, fire behavior readily becomes extreme. Daytime winds are normally upslope and up canyon, with late afternoon shifts to down slope, down canyon. Very strong winds associated with cold fronts moving through the area are not uncommon on the east side of the Sierra Nevada, particularly in the spring and fall.

Fire Regime and Condition Class (FR/CC) – Pinyon - juniper woodlands are predominantly 3/2. Shrub steppe is 3/2. Desert scrub is 3/1. Bristlecone pine is 1/2.

Values at Risk – Saline Valley Salt Tram National Register Site, historic features, bristlecone pines, wilderness values, rare plants, mule deer habitat, and visual resources.

Human Environment/Communities at Risk – No residential areas exist in this FMU. Recreational use is low, and is primarily Off-Highway Vehicle users, hunters, hikers and dispersed campers.

There are no communities at risk in this FMU.

Fire Management Objectives in Inyo Mountains Wilderness FMU

The 1964 Wilderness Act defines wilderness as "lands that appear to be natural or undisturbed, where human changes are essentially unnoticeable, where earth and its community of life are untrammeled by man …. as well as lands that contain ecological, geological or other features of scientific or historical value." For this definition of wilderness, Congress intended "untrammeled" to mean "unrestricted, unimpeded, or unhindered"- - - that is, they envisioned landscapes where natural processes and physical forces would occur naturally without human influence.

BLM's Wilderness Management Policy recognizes the importance fire plays in maintaining or restoring natural ecosystems. It further recognizes that all fires will be controlled to prevent human loss of life or property within or outside the wilderness. BLM's management direction for fire in the Inyo Mountains Wilderness is to restore fire to its natural role in the ecosystem to the maximum extent consistent with safety of persons, property and other resources. The long term objectives below identify how Wildland Fire Use will be implemented to create a landscape where plant diversity, competition, and succession will occur in its natural cycle. The overall objective is to allow natural processes to occur, thus restoring or maintaining the cycle of naturalness in the wilderness ecosystem.

Over the years, a buildup of fuels and changes in vegetation structure has occurred in the wilderness, primarily in the pinyon-juniper zones. A natural-caused wildfire would burn intensely in these plant communities. In the southern portion of the wilderness, a fire such as this would threaten the Saline Valley Salt Tram and other historic features. These historic features are considered integral elements of the wilderness area and any potential wildland fire threatening these values would be immediately suppressed to the extent possible.

Fuel reduction treatments around historic features are prescribed below. The purpose of these measures is to more effectively protect historic features by reducing the fuels around the sites and diminishing the potential for loss of these sites to wildland fire. Prior to fuel reduction treatments to protect cultural resources in the wilderness, the appropriate level of environmental analysis will be conducted and include "minimum tool" applications to meet the minimum requirements for wilderness administration.

The following describes the fire management objectives for the Inyo Mountains Wilderness:

Suppression –

- No more than 5% of BLM lands (2,251 acres) are burned by wildland fire over the 10-year period
- At all Fire Intensity Levels (FIL), 90% of all unplanned ignitions are kept under 100 acres in size
- No loss of "Values at Risk" or "Communities at Risk" from wildland fire
- The intensity of fire suppression effort is limited to the most economical response consistent with human and resource values at risk

Wildland Fire Use (WFU) –

- No more than 10% of BLM lands (4,502 acres) are burned via WFU over the 10-year period
- No loss of "Values at Risk" or "Communities at Risk" from WFU
- All Wildland Fire Implementation Plan (WFIP) protocols are followed for each WFU fire
- WFU emissions remain within those allowed by state and local air quality regulators

Prescribed Fire and Non-Fire Treatments –

- No more than 1% of BLM lands (450 acres) are treated via prescribed fire and/or non-fire means over the 10-year period
- Protect the Saline Valley Salt Tram, other historic structures, and the bristlecone pines
- Prescribed fire emissions remain within those allowed by state and local air quality regulators

Post-Fire Rehabilitation and/or Restoration –

- Assess all wildland fires for rehabilitation and restoration needs
- Where rehabilitation and/or restoration are deemed necessary or desirable, successfully achieve slope stabilization, re-establishment of appropriate, site-specific native plant species, or other rehabilitation/restoration work in a timely manner
- Ensure that equipment and stabilization material, e.g. straw etc… are weed-free

Community Protection and Assistance Objectives (Mitigation and Prevention) –

- Reduce the risk of human caused wildland fires, with special emphasis on recreationist-caused fires

Fire Management Strategies in Inyo Mountains Wilderness FMU

Suppression –

- Use Appropriate Management Response (AMR) to meet suppression objectives listed above, based on current conditions and fire location
- If the 5% of BLM lands (2,251 acres) decadal threshold for acres burned by wildland fire is met, a review of objectives and strategies will be initiated to develop new criteria for suppression of wildland fires, WFU, and prescribed fire and non-fire fuels treatments
- Except where human life and private property are threatened, wildland fire managers will request and work closely with, a Resource Advisor for all wildland fires exceeding or expected to exceed initial attack suppression efforts
- In non-emergency situations, request an archeologist be present prior to any heavy equipment activity. In emergency circumstances, where heavy equipment must be employed, conduct post-fire archeological evaluations to assess and document equipment damage to resources.
- In cases where wildland fire threatens listed cultural resource properties, employ all available suppression and resource protection measures to avoid loss to the property. Contact the Bishop Field Office Manager and archeologist as soon as the threat to listed properties is recognized. Request an archeologist be dispatched to the incident as soon as practicable. Use care to avoid unintended damage to the listed property as a result of the suppression and protection efforts.

Wildland Fire Use (WFU) –

- Treat up to 10% of BLM lands (4,502 acres) via WFU
- If the 10% (4,502 acres) decadal threshold for acres burned by WFU and wildland fire is met, a review of objectives and strategies will be initiated to develop new criteria for WFU, wildland fire suppression, and prescribed fire and non-fire fuels treatments
- WFU is not an option for fires threatening the Saline Valley Salt Tram or the bristlecone pines
- Use WFIP process to ensure involvement of Field Office Manager and appropriate resource specialists in all WFU fires
- Assign an archaeologist to fire crews who may build fire line or conduct other ground disturbing fire control activities, to ensure sites are not inadvertently damaged
- Conduct post-fire surveys, as needed, to determine the type and extent of cultural resources affected by the application of the wildland fire use strategy, and to assess resource impacts, such as the effects to the birefringent fronts of obsidian artifacts. These evaluations could be used to provide quantifiable data for making more informed decisions regarding wildland fire use models for fire management purposes

Prescribed Fire and Non-Fire Treatments –

- Treat up to 1% of BLM lands (450 acres) via prescribed fire and/or non-fire means over the 10-year period
- Treatment emphasis will be on protection of the Saline Valley Salt Tram structures and bristlecone pines
- An interdisciplinary approach is used to determine the best site-specific mix of prescribed fire and non-fire treatments to accomplish fuels reduction and other resource goals and objectives
- Fire and fuels management specialists will work closely with in local air quality regulators to ensure prescribed fire emissions stay within permitted levels
- Conduct appropriate pre-treatment surveys (archeological, botanical, etc…) to ensure no unintended loss of other resource values
- Consult with all affected Native American communities prior to any vegetation treatment of pinyon pine
- Conduct post-treatment surveys for increases in non-native plant species. If non-native species cover exceeds 5% in treated areas, implement appropriate eradication measures, as determined by an interdisciplinary effort.

Post-Fire Rehabilitation and/or Restoration –

- Implement post-fire rehabilitation and restoration efforts to facilitate slope stabilization, re-establishment of appropriate site-specific native plant species and reductions in cheat grass invasion
- Where rehabilitation and/or restoration are deemed necessary or desirable, successfully achieve slope stabilization, re-establishment of appropriate, site-specific native plant species, or other rehabilitation/restoration work in a timely manner
- Inspect equipment and stabilization material, e.g. straw etc. to ensure weed-free status

Community Protection and Assistance Strategies (Mitigation and Prevention) –

- Provide yearly fire prevention outreach materials to agencies offering campfire permits and general camping information to the public.
- Provide fire restriction and emergency closure information to the public.